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SENATE

REPORT
100-237

ORGANOTIN ANTIFOULING PAINT CONTROL ACT OF 1987

DECEMBER 8, 1987.—Ordered to be printed

Mr. MITCHELL, from the Committee on Environment and Public Works, submitted the following

REPORT

[To accompany S. 1788]

The Committee on Environment and Public Works to which was referred the bill (S. 1788) to protect the aquatic environment from certain chemicals used in antifouling paints, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

GENERAL STATEMENT

Paints used on the underwater portions of boat hulls are designed to prevent the growth of marine organisms. These "antifouling" paints traditionally contain metals such as copper to control marine growth.

In the early 1960s, paint manufacturers found that a group of chemical compounds, referred to as "organotins," improve the effectiveness and life of antifouling paints. The primary organotin compound now used in antifouling paints is tributyltin (TBT). Marine paints containing organotin compounds are now used on up to 70 percent of commercial and recreational boats. Organotins are also used to control aquatic growth on fishing gear and a range of marine structures.

There is growing evidence that organotin compounds are affecting "nontarget" marine and freshwater organisms (i.e. marine life generally, rather than just those organisms growing on boat hulls).

Organotin compounds such as TBT are extremely toxic. Toxic effects occur to some organisms at exposures of less than one hundred parts per trillion. Mollusks (e.g. clams and oysters) are the most sensitive. Fish and crustaceans (shrimp, lobster, crab) also show negative effects at low exposures.

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The Environmental Protection Agency (EPA) has issued a water quality advisory indicating the concentration of TBT which is protective of aquatic life and the aquatic environment. For fresh water, this level is 26 parts per trillion (ng/L). For salt water, the level is 10 ng/L.

EPA has identified TBT at concentrations causing adverse effects in U.S. coastal waters and the Great Lakes. TBT contamination is a particular problem in Chesapeake Bay. Monitoring at several sites shows concentrations as high as 464 ng/L. The average concentration level at the monitoring station in Annapolis harbor was 110 ng/L. Concentrations of 33 ng/L were found in the Severn River.

The United States lags behind other nations in regulating organizations in paints. France, England, and Japan all have limits on the use of organotins. Germany and Switerzerland have totally prohibited use of TBT in fresh water.

A number of States have established restrictions on the use of organotin paints. These States include Virginia, Maine, Maryland, Alaska, Washington, Michigan, New York, California, North Carolina, Delaware, Hawaii, Texas, and Oregon. Regulations in effect include bans on use of TBT paints, restrictions on the rate of release of TBT from paints, and prohibitions on the application of TBT paints to smaller boats (i.e. under 25 meters).

Growing evidence of the environmental effects of TBT paints is of concern to the Congress and has generated several initiatives to control contamination.

Senators Trible and Cohen offered an amendment to fiscal year 1986 appropriations legislation to prevent use of TBT paints on virtually all Navy ships until the EPA determined that these paints would not pose an unacceptable hazard to the environment. This restriction was also included in fiscal year 1987 appropriations legislation.

Early in 1987, Senators Trible, Cohen and Warner introduced S. 428 providing for restrictions on the release rate of TBT from paints and establishing penalties for violations. Comparable legislation was introduced in the House of Representatives.

On April 24th of this year, the Subcommittee on Environmental Protection, chaired by Senator Mitchell, held a hearing on issues related to organotin compounds in the marine environment. The Subcommittee heard testimony from a range of witnesses including the EPA, paint manufacturers, the Navy, and seyeral States.

Based on monitoring data indicating organotins to be a problem, EPA initiated a "Special Review" of TBT in antifouling paints in January of 1986 under authority in the Federal Insecticide, Fungicide, and Rodenticide Act (FIRFA). This started a process of gathering information from companies manufacturing organotin antifouling paints concerning release rates, ecological effects, environmental fate, and worker exposure.

Based on data gathered to date, EPA recently proposed to restrict the use of antifouling paints containing organotins. Major elements of the proposal call for prohibiting organotin antifouling paints with a release rate of greater than 4 micrograms per square centimeter per day and prohibiting use of any organotin paint on boats of less than 65 feet.

In October of this year, Senators Trible, Cohen, Mitchell and Chafee introduced S. 1788. This legislation provides for several major limitations on antifouling paints containing organotins.

The reported bill prohibits the use of all organotin paints with a release rate of more than 3 micrograms per square centimeter per day. This release rate will remain in effect pending final action by EPA to establish an alternate release rate under the authority of the FIFRA statute.

The bill also bans the use of any organotin paints on any vessel 25 meters (82 feet) in length or less. This prohibition does not apply to aluminum hulls or outboard motors. Organotin paints with a release rate of 3 micrograms per square centimeter per day or less may be used in these circumstances.

Other provisions of the bill require the Administrator of the EPA to publish criteria for organotion compounds in waters not later than September 1, 1988, to monitor the concentrations of organotins in esturaries, and to conduct research into alternatives to organotin or chemcial antifouling systems. In addition, the Secretary of the Navy is required to test, not less often than annually, the waters of the home ports of Navy ships to determine the level of organotin contamination.

A more detailed description of the legislation is provided in the following section-by-section analysis of the bill.

Section-by-Section Analysis

SECTION 1. SHORT TITLE

This Act may be cited as the "Organotin Antifouling Paint Control Act of 1987".

SECTION 2. DEFINITIONS

This section provides definitions of key terms used in the bill. The term "organotin" is specifically defined to include any compound of tin used as a biocide in an antifouling paint. Other terms defined include "qualified anitfouling paint" and "release rate".

SECTION 3. FINDINGS AND PURPOSE

The findings section states that as much as 70 percent of commercial shipping fleet and recreational boats are painted with organotin paints, that laboratory and field studies show that organotin is very toxic to marine and fresh water organisms at very low levels, that vessels that are less than 25 meters in length contribute a large portion of organotin compounds released into the most sensitive, shallow bays and estuaries, and that the Environmental Protection Agency has determined that concentrations of organotin currently in the waters of the United States may pose unreasonable risks to oysters, clams, fish, and other aquatic life.

The purpose section states that this Act is intended to protect the aquatic environment by reducing immediately the quantities of organotin compounds entering the waters of the United States.

SECTION 4. PROHIBITION

This section provides general prohibitions concerning organotin antifouling paints.

Section 4(a) provides that no person may apply any organotin antifouling paint to vessels of 25 meters (82 feet) or less in length. An exception to this general prohibition is provided for vessels made of aluminum and for outboard motors. Paints applied to aluminum vessels or outboard motors, however, must be certified by the Administrator of EPA under section 5 of this legislation.

The Committee heard considerable testimony regarding both State and international restrictions on organotin use on smaller vessels. The 25-meter restriction, first initiated by France in 1982, and later by the United Kingdom, is rapidly becoming the international standard regarding the use of organotin paints on small vessels. Several States including Virginia, Maryland, Delaware, California, New York, Maine, and Oregon have adopted State-level restrictions for TBT use on vessels of 25 meters of less.

EPA has proposed a similar prohibition addressing only boats of 20 meters (65 feet) or less. The reported bill contains the 25-meter provision for the following reasons:

First, enactment of a prohibition on application of organotin paints to boats of 25 meters or less is consistent with the length prohibitions already in effect in a number of States and other countries. A different length prohibition enacted at the national level would result in confusion concerning the application of the length prohibition and put boatyards in those States at a disadvantage when competing for repair and maintenance projects.

Second, an objective of the prohibition is to reduce organotin compounds in shallow waters and bays. There is reason to believe that boats between 65 and 82 feet frequent these shallow waters and contribute to the contamination of these waters. Reduction of organotins to levels safe for the marine environment will require the full application of restrictions which are reasonable and appropriate.

Third, the assertion of the EPA that there is a substantial difference in the cost and availability of drydocking facilities for boats under 65 feet and those between 65 and 82 feet is unconvincing. To the extent that such differences may exist, they are not sufficient to warrant reducing the 82 foot (25 meter) limit, given the considerations cited above.

Section 4 (b) and (c) prohibit the use or sale of any organotin antifouling paint other than a "qualified antifouling paint". Section 2 (6) of the bill defines "qualified antifoulant paint" as a paint certified by the Administrator of the EPA to have a release rate of not more than 3 micrograms per square centimeter per day.

EPA has proposed establishing a release rate of 4 micrograms per square centimeter per day and other legislative proposals provide for a release rate of 5 micrograms per square centimeter per day. The reported bill adopts the level of 3 micrograms per square centimeter per day for several reasons:

First, the objective of the legislation is to assure the protection of aquatic life and the marine environment. Evidence from the EPA and other sources indicates that, even with the prohibition on use

of organotin paints on smaller boats and the release rate limits, some coastal waters will contain levels of organotins above the level identified by the EPA as safe. Based on this concern, it is appropriate to require the lowest possible release rate presently available from several manufacturers. Data from the EPA indicate that a total of 24 paints from 5 companies could qualify under the 3 micrograms per square centimeter per day limit.

Second, the Committee reported bill reflects the concept of applying the best available pollution control technology to various sources of pollution. This concept, which is contained in a number of major environmental statutes, provides that an industry should achieve the highest possible degree of pollutant reduction needed to assure environmental goals. The release rate of 3 micrograms per square centimeter per day is achievable by the industry and this release rate is necessary to assure protection of aquatic life and the marine environment.

Finally, the release rate of 3 micrograms per square centimeter per day is within the range of release rates adopted by States. Several States have banned antifouling paints containing any amount of organotins. Several other States (i.e. Maine and Alaska) have set release rates of 3 micrograms per square centimeter per day. A number of other States have established release rates of 5 micrograms per square centimeter per day.

Paragraph (6) of the definition section of the bill also provides that the Administrator may establish an alternate release rate pursuant to the process initiated by the Administrator's Position Document January 8, 1986, and authorized under the FIFRA statute. If the Administrator establishes a release rate under this authority and the rate is in effect, that release rate, rather than the release rate established in this bill, shall be the effective release rate.

Organotin contamination of waters is a significant problem and warrants immediate attention. While the EPA has authority to impose restrictions on organotin use under the FIFRA statute, the effective date of such restrictions could be delayed for several years. It is important to assure that an appropriate release rate, which is protective of the aquatic environment, is put into effect promptly. This legislation would assure that an appropriate release rate and other restrictions will take effect 180 days after enactment. At the same time, the EPA should continue to exercise its existing authority under FIFRA, where this is practicable.

Section 4(d) prohibits sale and distribution of any substance containing organotin for the purpose of adding such substance to paint to create an antifouling paint.

This provision will reduce the use of so called "free association paints" which have been identified as a significant source of organotins in the marine environment. These paints often have a very high release rate and can cause significant environmental effects.

SECTION 5. CERTIFICATION

This section provides that the Administrator of EPA is to certify paints which meet a release rate of 3 micrograms per square centimeter per day. This must be done within 90 days after the date of the enactment of this Act or 90 days from the date of receipt of

information submitted in response to a data call in or any other provision of Federal law.

SECTION 6. MONITORING

This section requires that the EPA conduct a monitoring program to assess the extent of organotin contamination of major estuaries and provide annual reports to the Congress. This section also provides that the Administrator is to assist States in monitoring marine and other waters for the presence of organotins to the extent practicable.

Section 6 also requires the Navy to conduct tests for organotin in home ports and provide data to the Governor of the State in which the home port is located and to the Administrator. This provision is intended to apply only to home ports within the United States.

The general objective of this section is to provide baseline data on the levels of organotins in the waters of the United States and to provide a basis for periodic assessment of the effectiveness of the controls on organotins contained in this legislation.

SECTION 7. CIVIL PENALTIES

This section provides the Administrator of the EPA with the authority to assess civil penalties of up to $5,000 for each violation of the Act.

The Administrator is to provide any person to be assessed a civil penalty under the Act with written notice and an opportunity to request a hearing. Any person who requests a hearing and is aggrieved by an order assessing a civil penalty may file a petition for judicial review with the United States Court of Appeals.

In determining the amount of civil penalty, the Administrator is to take into account the nature, circumstances, extent, and gravity of the violation. The Administrator may also consider the ability to pay, effect on ability to continue to do business, economic benefit to the violator resulting from the violation, as well as the history of prior violations.

SECTION 8. AUTHORITY TO SELL EXISTING STOCKS

This section provides a period of 180 days following enactment for the sale or other use of organotin antifouling paints that do not meet the release rate standard and which existed prior to the enactment for this Act.

This provision is intended to provide a reasonable opportunity for persons engaged in the manufacture and sale of organotin containing paints to avoid significant economic losses associated with the restrictions provided for in this legislation.

SECTION 9. DISCLAIMER

Section 9 establishes that this legislation will not preempt related requirements of any State or political subdivision and further states that compliance with the requirements of any State or political subdivision respecting antifouling paint or any other substance containing organotin does not relieve any person of the obligation to comply with the provisions of this legislation.

SECTION 10. WATER QUALITY CRITERIA DOCUMENT

This section requires EPA to issue a final water quality criteria document for organotins, pursuant to section 304 of the Clean Water Act, not later than September 1, 1988.

The section provides a specific legislative directive to the EPA to move as rapidly as possible in developing and issuing a final water quality criteria document. Water quality criteria will provide a basis for development and adoption of State water quality standards for organotins. State adoption of water quality standards will complement the specific restrictions provided for in this legislation. For example, if organotins exceed the levels specified in the State standard after the application of the requirements of this legislation, a State could impose additional pollutant controls to assure that the standard is achieved.

SECTION 11. RESEARCH

This section directs EPA, in cooperation with the Secretary of the Navy, to conduct a research program to develop alternatives to organotin compounds in antifouling paint and to develop non-chemical antifouling systems. Further, it directs the Administrator to report to Congress within 3 years on the progress of this research.

This provision is intended to identify the potential to reduce water pollution by organotin compounds by development of alternative, non-chemical antifouling systems. If successful, such research could lead to significant reductions or eventual elimination of organotin compounds in waters.

SECTION 12. EFFECTIVE DATES

This section provides that the provisions of this legislation take effect on enactment. Section 12(b) provides that prohibitions relating to the release rate of a paint will be superceded by an alternate release rate established by the EPA once the EPA takes final action to establish such an alternate release rate. The provision also provides that the release rate stipulated in the bill (i.e. 3 micrograms per square centimeter per day) is applicable during any appeal of the decision of the Administrator or subsequent litigation.

This provision assures that the release rate in effect for the long-term will be the release rate which is determined by the EPA, using the most recent and complete scientific information available, to be the most appropriate and effective.

HEARING

The Subcommittee on Environmental Protection held a hearing on issues related to use of organotin antifouling paints on April 29, 1987.

Testifying at the hearing were Senators Paul S. Trible of Virginia and William S. Cohen of Maine; the Assistant Administrator for Pesticides and Toxic Substances of the Environmental Protection Agency; the Regional Administrator of Region III of the Environmental Protection Agency; Admiral M. V. Ricketts of the Naval Sea Systems Command, United States Navy; representatives of the

State governments of Maryland and Virginia; a representative of the manufacturers of organotin compounds; and a representative of a major paint company.

For further information about the hearing, see Senate Hearing Record 100–89.

Rollcall Votes

Section 7(b) of rule XXVI of the Standing Rules of the Senate and the rules of the Committee on Environment and Public Works require that any rollcall votes taken during consideration of this bill be announced in this report.

On November 10, 1987, the Committee on Environment and Public Works met to mark up S. 1788 as reported by the Subcommittee on Environmental Protection. One rollcall vote was taken which resulted in the bill being reported by a unanimous vote of 11–0. Voting to report the bill were Senators Baucus, Breaux, Burdick, Chafee, Graham, Lautenberg, Mikulski, Mitchell, Pressler, Stafford, and Warner.

Regulatory Impact

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact of the reported bill: It is not expected that there will be significant impacts resulting from the enactment of this legislation.

Cost of Legislation

Section 403 of the Congressional Budget and Impoundment Control Act requires each bill to contain a statement of the cost of such bill prepared by the Congressional Budget Office. That report follows:

U.S. Congress,
Congressional Budget Office,
Washington, DC, December 3, 1987.

Hon. Quentin N. Burdick,
Chairman, Committee on Environment and Public Works, U.S. Senate, Washington, DC.

Dear Mr. Chairman: The Congressional Budget Office has reviewed S. 1788, the Organotin Antifouling Paint Control Act of 1987, as ordered reported by the Senate Committee on Environment and Public Works, November 10, 1987. CBO expects that enactment of the bill's new pollution research and abatement initiatives would increase federal outlays by about $4 million over the next three fiscal years. The cost of federal compliance with other provisions in the bill, such as the prohibition on organotin-based paint, cannot be estimated at this time.

S. 1788 would prohibit the application of any marine paint containing organotin to most vessels 25 meters or less in length. The bill would also prohibit the distribution of any paint that releases organotin at a rate above that specified in Section 5, pending a final decision by the Environmental Protection Agency (EPA) re-

garding the release of that substance into the aquatic environment. The EPA would be directed to complete its certification of qualifying organotin paints within 90 days of the bill's enactment, or, subsequently, within 90 days of the receipt of information on such a paint. The agency would be required to monitor organotin levels in representative U.S. estuaries for seven years and to issue an annual report to the Congress on its findings. In addition, the U.S. Navy would be required to monitor its home ports and related waters for organotin contamination and report the results to the Congress.

Because most of the regulatory activities mandated by S. 1788 are already being carried out under existing law, incremental costs incurred to fulfill the bill's directives would be minimal. However, additional expenditures of about $200,000 would be incurred during fiscal year 1988 to issue a final water criteria document on organotin compounds, which Section 10 requires the EPA to do by September 1, 1988. This money would be used to expedite necessary research support, probably through the use of a private lab with some additional agency effort. Because this document ultimately would have been issued anyway, some portion of the costs incurred to complete it in 1988 might be offset by reduced funding requirements in later years. Alternatively, costs in later years might instead be higher if the agency is required to review and revise the expedited document after more registrant data becomes available in 1989 and 1990.

Section 11 of the bill would direct the EPA (in cooperation with the Navy) to conduct research into alternative antifouling chemicals and systems. Based on information obtained from the EPA, CBO estimates that a three-year research program of this type would increase federal outlays by about $1.4 million in fiscal year 1988, and by a total of $3.8 million over the life of the program. Costs could be higher or lower, depending on the applicability of current research in this area and the availability of industry support.

The monitoring functions required of the EPA by Section 6 are not expected to increase EPA costs because they would most likely be carried out (as they would have been under current law) by registrants of organotin-containing substances as part of their certification requirements. The Navy's monitoring for organotin contamination would increase its costs, but the increase cannot be estimated at this time and is probably not significant. The costs of preparing annual reports under Section 6 are also not expected to be significant.

Section 7 would provide for the imposition of penalties on any person who violates the bill's prohibitions. This section would also provide for judicial review of penalty assessments that are ordered after hearings. The judicial review of administratively imposed civil penalties would probably result in increased federal costs (because of the greater federal court caseload) but these costs are impossible to estimate because they would depend on unknown factors such as the numbers of violations, of persons who would request a hearing, and of persons who would appeal any resulting penalty order.

Finally, the potential cost of federal compliance with the bill's organotin restrictions has not been estimated. In the case of government vessels with non-aluminum hulls, costs may not increase because the use of an organotin-based paint is not necessarily more economical than that of paints containing other antifoulants such as copper. However, vessels with aluminum hulls cannot usually be painted with copper-based substances, and treatment with low-release organotin paints is often less effective or infeasible. Thus, additional costs could be incurred for the increased fuel consumption of fouled vessels or to repaint vessels more often, because many low-release organotin paints must be reapplied more often than other paints. The cost increases incurred by federal agencies (particularly the Navy and the Coast Guard) would depend on the near-term development of better organotin paints and/or alternative antifouling methods, as well as the final qualifying release rate adopted by the EPA. Because the federal government has relatively few vessels with aluminum hulls, costs increases are not likely to be substantial.

If you wish further details on this estimate, we will be pleased to provide them.

With best wishes,

Sincerely,

JAMES BLUM,
(For Edward M. Gramlich, Acting Director).

CHANGES IN EXISTING LAW

Section 12 of Rule XXVI of the Standing Rules of the Senate requires publication of any changes made in existing law by the reported bill. This bill makes no changes to existing law.

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Calendar No. 467

100TH CONGRESS
1st Session

SENATE

REPORT
100-240

ENDANGERED SPECIES ACT AMENDMENTS OF 1987

DECEMBER 9 (legislative day, DECEMBER 8), 1987.—Ordered to be printed

Mr. BYRD (for Mr. BURDICK), from the Committee on Environment and Public Works, submitted the following

REPORT

together with

ADDITIONAL VIEWS

[To accompany S. 675]

The Committee on Environment and Public Works, to which was referred the bill (S. 675) to authorize appropriations to carry out the Endangered Species Act of 1973 during fiscal years 1988, 1989, 1990, 1991, and 1992 having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

GENERAL STATEMENT

This legislation authorizes increased appropriation of funds to carry out the Endangered Species Act through fiscal year 1992 and amends the Act further to improve the recovery and protection of species listed under the Act, species that are candidates for listing, and species that have recently recovered and been removed from the Act's lists.

The bill gives the U.S. Fish and Wildlife Service enforcement authority, concurrent with that of the Animal and Plant Health Inspection Service, over the importation and exportation of protected plants. It requires the status of candidate species to be monitored. Provisions are added to the Act to improve the development, implementation and review of plans for the recovery of listed species. The status of species that have recovered and been de-listed must be monitored for 5 years. A "cooperative endangered species conservation fund" is established to provide Federal monies on a

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matching basis to the States for endangered species conservation projects. The bill makes it unlawful to damage or destroy a plant on federal lands or in violation of a State law or in the course of any violation of a State criminal trespass law. Finally, the Act is amended by the bill to increase the maximum amounts of civil penalties and criminal fines and to allocate a portion of these receipts to the cooperative endangered species conservation fund.

PURPOSE AND BACKGROUND

History of the Endangered Species Act

The first legislation enacted specifically to protect endangered species was the Endangered Species Preservation Act of 1966 (P.L. 89-669). The 1966 Act directed the Secretary of the Interior to "carry out a program in the United States of conserving, protecting, restoring and propagating selected species of native fish and wildlife;" authorized the acquisition of endangered species habitat for inclusion in the National Wildlife Refuge System; required the preparation of an official list of endangered species; and required the Departments of the Interior, Agriculture, and Defense to protect species of fish and wildlife threatened with extinction and the habitat of these species to the extent consistent with the primary purpose of those departments.

The Endangered Species Conservation Act of 1969 (P.L. 91-135) corrected several weaknesses of the 1966 Act. The 1969 law expanded the Secretary's habitat acquisition authority. It also redefined fish and wildlife to include "any wild mammal, fish, wild bird, amphibian, reptile, mollusk, or crustacean." The most significant improvements, however, were the authorization to publish a list of species and subspecies of fish and wildlife threatened with "worldwide" extinction and the prohibition on importation of these species and subspecies into the United States.

Four years later, the Congress enacted the Endangered Species Act of 1973 to provide greater protection for endangered and threatened species. This law embraced "any member of the animal kingdom" within its protective reach and, for the first time, authorized the listing and conservation of plants. A category for threatened species was established in addition to the existing one for endangered species to protect plant and animal species before they reach dangerously low numbers.

The 1973 Act also provided for the protection of habitat critical to the continued existence of threatened and endangered species. Most importantly, under section 9 of the Act, the taking of endangered species was prohibited for the first time and, under section 7, strict requirements were placed on all federal agencies to protect listed species and their habitat.

In 1978 a number of major changes were made in the 1973 Act. That year the Congress amended section 7 of the Act to establish an Endangered Species Interagency Committee to review federal agency actions that would jeopardize the continued existence of a threatened or endangered species or adversely modify habitat critical to such species. The Endangered Species Committee was empowered to determine, based on this review, whether the otherwise prohibited federal action should be allowed to proceed. At the same

time, the Congress also amended section 4 to require the designation of critical habitat and consideration of the economic consequences of such designation as part of the process of listing a species under the Act.

In 1979 the Congress amended several sections of the 1973 Act largely to bring them into conformance with agency practice and judicial decisions. None of the amendments significantly changed the Act's substantive provisions.

By 1982 it was clear to many that the 1978 amendments to section 4 had burdened the listing process with non-biological factors and, as a result, had greatly decreased the number of species listed annually. Consequently, in that year the Congress adopted amendments that prohibit consideration of economic impact in listing decisions and ensure that listings or delistings are based solely on biological data. Time frames for the various steps in the listing process also were incorporated into section 4 of the Act to require that petitions to list species are considered expeditiously.

A number of changes were made in 1982 in the consultation process established under section 7 of the Act to bring greater predictability to that process. Time frames were set and a procedure for consultation at the initial stages of a project's development was incorporated. The 1982 amendments also modified procedural aspects of the section 7 interagency committee review process that was created in 1978 to, in part, shorten the time in which a decision has to be rendered. Another change to the 1973 Act provided that actions which are in compliance with measures specified in section 7 consultations to minimize takings may be exempt from the general prohibition in section 9 against incidental takings. Provisions also were added to section 10 of the Act to encourage establishment of experimental populations for the recovery of species.

Present Status of the Endangered Species Act

The authorization for appropriations to implement the Endangered Species Act expired on September 30, 1985. The requirements and prohibitions of the law are unaffected by this lapse in authorization. Similarly, Federal funds have been appropriated for each of fiscal years 1986 and 1987.

The Committee reported a bill on March 14, 1986, to continue the spending authorization through fiscal year 1988 with increased funding ceilings but no other amendments. In addition, the House of Representatives passed a bill in 1985 which also extended the authorization through fiscal year 1988. Neither bill was considered by the full Senate in the previous Congress. A free-standing provision, however, was enacted in 1986 (P.L. 99-625) which resolved differences between the Endangered Species Act and the Marine Mammal Protection Act to allow establishment of a second population of sea otters off the California coast.

Implementation of the Endangered Species Act

The present level of funding falls far short of what is needed to protect and recover species threatened with extinction. Funding has remained almost constant for the past seven years, yet the number of species protected under the Act has nearly doubled in that time. Nearly 1,000 species have been identified as candidates

that warrant listing and protection under the Act yet only about 50 species are being added to the Act's lists each year. Only half of the listed U.S. species have plans outlining steps to recovery. Only five of the 425 U.S. listed species have recovered to the point where they no longer require protection under the Act.

Current Federal/State cooperative efforts to protect endangered species also are inadequate and are in danger of disintegrating altogether. The amount of money currently appropriated for matching grants to the States under section 6 of the Act is roughly the same as it was in 1977. Yet, there are four times as many State cooperative agreements eligible for section 6 support as there were in 1977. The Administration has sought to eliminate section 6 funding in 5 of its 7 budget requests, and the legislative proposal it transmitted to the Congress to amend the Act would not have continued the authorization of appropriations for State grants. The uncertainty surrounding the availability of funds for State projects in a given year, coupled with the small sums that have been available in recent years, have made an increasing number of states turn away from the section 6 program altogether.

One consequence of inadequate appropriations and section 6 support is that far too many recovery plans for listed species have not been implemented. In fiscal year 1986, 56 percent of the money spent by the Fish and Wildlife Service was allocated to less than 4 percent of the listed species. Recovery plans have been written for 243 of the 425 U.S. species listed under the Act but most have not received funding to begin implementation and provide no criteria by which to judge their success. In general, recovery plans have failed to include consistently criteria, time frames and estimated costs for recovery.

The present Act is deficient in the level of protection provided for plants, which is insufficient and lags behind that provided for animals. About a third of the U.S. species listed as threatened or endangered are plants and the majority of candidates for future listing are plants. Currently, anyone who captures, kills or harms a listed animal commits a violation of the Act for which substantial criminal and civil penalties may be imposed. However, it is not unlawful to pick, dig up, cut or destroy a listed plant unless the act is committed on federal land. Even on Federal land, however, there is no violation unless the plant is removed from the area of Federal jurisdiction. Of the 54 plants listed since 1985, 44 occur at least partially on non-Federal lands. Under the current system, state trespass laws often are the only deterrent against vandals and unscrupulous collectors of endangered plants.

Yet another area of concern is that the National Marine Fisheries Service and the Department of Agriculture to date have played a relatively inactive role in administering the Act. Only six marine species have been listed by the National Marine Fisheries Service and the agency has approved only two recovery plans. In 1985, the Service listed its first species in nearly six years. Most of the agency's actions have resulted from congressional directives or petitions from outside groups. The Department of Agriculture's Animal and Plant Health Inspection Service has referred to the Department of Justice only three cases of suspected violations involving import or export of protected plants since 1978. Since 1981, the Fish and

Wildlife Service has referred nearly a thousand such cases involving protected wildlife.

Over the past 2½ years the Committee has reviewed implementation of the Act following the decision of the U.S. Court of Appeals for the Eighth Circuit, in the case of *Sierra Club, et al.* v. *William Clark, et al.*, 755 F.2d 608 (8th Cir. 1985). In that case, the court held that the Secretary of the Interior may not authorize the regulated taking of threatened species except, as the Act's definition of the term "conservation" specifies, "in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved."

The Court of Appeals' decision has been a source of concern to some State wildlife officials because of its potential effect on the management of grizzly bear and northern Rocky Mountain wolf populations. Of particular concern has been the potential effect of the decision on the present regulated taking of the Northern Continental Divide population of grizzly bears in Montana. The U.S. Fish and Wildlife Service has, through regulation, found that the situation in Montana presents the extraordinary case where pressures within this population cannot be otherwise relieved and has allowed the State of Montana to conduct limited and closely controlled public hunts of this population every year since it was listed as threatened in 1975.

The Committee has held several hearings devoted to issues surrounding management of the grizzly bear. In the course of those hearings, the Committee has not been presented with evidence or testimony that either challenges the U.S. Fish and Wildlife Service determination or questions the utility of the Montana program. It appears at this time that the Montana program is consistent with the requirements of the law.

Concerns also have been raised about the potential effect of the Eighth Circuit's opinion with respect to the Fish and Wildlife Service's recovery plan for the Rocky Mountain Wolf, which proposes to introduce a population of wolves, designated as "experimental" and treated as "threatened" under the Act, to Yellowstone National Park. The states of Montana, Wyoming and Idaho have maintained that the court's decision regarding threatened species might jeopardize the use of public hunting or trapping to control individual wolves of the experimental population when they occur outside the Park.

In 1982, Congress amended the Endangered Species Act to include a new section 10(j) to encourage the establishment of such "experimental populations" of endangered or threatened species. Experimental populations are populations that are purposefully introduced outside the current range of the species to further the species' conservation. Section 10(j) gives the Secretary great flexibility in designing a program for the conservation of an experimental population in order to address the particular needs of that population, including the need to avoid public opposition to the introduction of the population.

Since the Eighth Circuit addressed the Secretary's authority to allow regulated takings of a threatened species and since section 10(j) provides that experimental populations shall be treated as if they were listed as threatened, some have interpreted *Sierra Club*

v. *Clark* as limiting the Secretary's flexibility in developing experimental populations regulations.

This interpretation is wrong for several reasons. First, the court's opinion explicitly distinguished experimental populations regulations under section 10(j) from regular threatened species regulations under section 4(d) and, therefore, contains no ruling on the former. Second, and most important, the report by this Committee in 1982 made clear that the Secretary has sufficient flexibility to allow regulated taking of experimental populations where necessary to deal with the particular circumstances facing the population. As we stated in that report on the 1982 amendments to the Act:

> The purpose of requiring the Secretary to proceed by regulation is to provide a vehicle for the development of special regulations for each experimental population that will address the particular needs of that population. The Secretary is granted broad flexibility in promulgating regulations to protect threatened species. These regulations may even allow the taking of threatened animals. . . . Where appropriate, the regulations may allow for the direct taking of experimental populations. For example, regulations pertaining to the release of experimental populations of predators, such as red wolves, will probably allow for the taking of these animals if depredations occur or if the release of these populations will continue to be frustrated by public opposition. (S. Rep. No. 418, 97th Cong., 2d Sess. 8 (1982).)

We note with approval that, based upon identical language in the report of the House Committee on Merchant Marine and Fisheries, the Fish and Wildlife Service adopted this interpretation in promulgating regulation to implement section 10(j). 49 Fed. Reg. 33885, 33889 (August 27, 1984). For all of these reasons, the Eighth Circuit's opinion in *Sierra Club* v. *Clark* does not affect the flexibility granted in section 10(j) for development of experimental population regulations.

Greater emphasis on research and education is needed to improve protection, management, public understanding and recovery of large mammalian predator species, such as the gray wolf and the grizzly bear, with minimum disruption to man and other species that must coexist within the same ecosystems. One such effort in this direction that should receive support is the International Wolf Center planned in northeastern Minnesota. A second area where additional research is necessary is the effect of introduction of the northern Rocky Mountain gray wolf on populations of grizzly bears, ungulates and other species of the Yellowstone ecosystem.

An additional area of concern with current implementation of the Act relates to regulations promulgated by the Secretary on June 3, 1986, which appear intended to limit the recovery and protection of species under section 7 of the Act. To the extent that these regulations attempt to restrict the Act's requirements that each federal agency consult with the Secretary to ensure that its actions are not likely to jeopardize the continued existence and recovery of any listed species, the regulations have no statutory

basis, are contrary to congressional intent, and are contrary to the law.

SECTION-BY-SECTION ANALYSIS

Section 1. Definitions

Section 1 of the bill amends paragraph 15 of section 3 of the Act to give the U.S. Fish and Wildlife Service enforcement authority, concurrent with that of the Agriculture Department's Animal and Plant Health Inspection Service (APHIS), over the importation and exportation of plants protected by the Act of the Convention on International Trade in Endangered Species (CITES).

Currently, that authority is vested solely in the Secretary of Agriculture, who has delegated it to APHIS. The resources allocated by APHIS to prevent the sizeable and sophisticated illegal international trade in protected plants are inadequate. In an effort to improve enforcement, APHIS and the Fish and Wildlife Service had a memorandum of understanding in 1984 and 1985 under which the Fish and Wildlife Service investigated some import and export violations. During that period, the Fish and Wildlife Service initiated five prosecutions under the agreement for illegal trade in plants protected under CITES. By contrast, during the period 1981 to 1985, according to information submitted by the Department of Justice, APHIS did not initiate a single prosecution of an alleged violator of CITES or the Act.

This amendment to the Act is intended to supplement the existing enforcement with respect to import and export violations involving protected plant species. It is not intended to shift primary enforcement responsibility at ports for such violations away from the Department of Agriculture to the Fish and Wildlife Service. Both agencies are expected to use their full powers against violations of the Act or CITES. It is recommended that the agencies enter into a new memorandum of agreement to ensure that each agency is aware of its counterpart's enforcement actions. In addition, it is recommended that an interagency working group, consisting of the APHIS, Fish and Wildlife Service, Justice Department and Customs Service, be constituted to formulate and implement an effective enforcement strategy.

Section 2. Listing

Section 2(a) of the bill amends subparagraph (C) of section 4(b)(3) of the Act to require the Secretary to implement a system to monitor the status of candidate species, i.e. those that appear to warrant listing but that have not yet been listed or denied listing. In addition, the existing emergency listing authority is to be used whenever, as a result of the monitoring, it is determined to be appropriate to prevent a significant risk to the well-being of any such species.

The Fish and Wildlife Service publishes and periodically updates comprehensive notices containing lists of native species considered by the Service to be candidates for listing. These include many species for which petitions to list were filed many years ago, and other species identified by the Fish and Wildlife Service. The monitoring system is intended to apply to all such species.

The Service currently has sufficient information to warrant preparation of a formal listing proposal for approximately 950 so-called "category I candidate species." At the present level of resources, however, the Service projects that it may take approximately 20 years to list these candidate species. Under the current law, these species receive no protection until they are formally proposed for listing. This amendment will correct this shortcoming.

The Fish and Wildlife Service's comprehensive candidate notices are important land use planning and habitat protection tools for state and federal agencies, private conservation organizations, private landowners and the scientific community. The advanced notice that a species may be listed in the future reduces the potential for serious conflict later with other activities. In the past three years, however, several candidate species are reported to have gone extinct before listing was completed. Other species have undergone substantial declines in numbers or distribution before they were protected.

The amendment, then, is intended to establish a system that will help prevent extinctions or substantial declines of candidate species. The Fish and Wildlife Service is responsible for determining the extent and intensity of monitoring that is appropriate. An important component of such a system will be continued publication of comprehensive notices based on a regular review of status surveys. The Service also should consult, coordinate and encourage communication with other Federal and state agencies, private conservation organizations, and members of the academic and scientific community in the development and updating of its comprehensive candidate notices. Because of the importance of candidate species protection, the Secretary is requested to report to this Committee within 6 months of enactment of this amendment with respect to the measures that have been taken, and are planned, to implement the monitoring system.

Section 2(b) of the bill amends subsection (e) of section 4 of the Act to ensure that the U.S. Fish and Wildlife Service need not regulate both trade and taking of species listed as threatened or endangered because of their similarity of appearance to other listed species if regulation of only one of these activities is sufficient to protect the endangered or threatened species.

For some species the regulation of trade is important. For example, trade in the hides of American alligators is monitored because of the similarity of products made from alligators and those made from endangered crocodilians. However, it is not necessary to regulate the taking of alligators because of this problem with trade. With other species, because of the close similarity of appearance to listed species occupying the same habitat, a prohibition on take might be appropriate without necessarily regulating trade of the "similarity of appearance" species.

Section 3. Recovery Plans

Section 3 of S. 675 amends section 4(f) of the Act to require explicitly the development and implementation of recovery plans without regard to a species' taxonomic classification, e.g. bird, mammal, invertebrate, plant.

As this Committee stated in the report accompanying its 1982 amendments to the Act, "[p]referential treatment for 'higher life forms', species of a higher taxonomic order, has no basis in the Act nor in these amendments." Unfortunately, however, for the 5-year period from fiscal year 1982 through fiscal year 1986, 5 percent of the listed U.S. species (12 species of birds, mammals, and sea turtles) received about 45 percent of the available funding for development and implementation of recovery plans and actions. Little or no money was expended for recovery of listed insects, mollusks, crustaceans and plants.

Certainly, the costs of recovery actions for some species, such as the California condor and whooping crane, are much greater than for other species such as the small whorled pogonia. However, relatively small investments of resources for the small whorled pogonia and many other species have the potential of yielding large returns.

For example, the cost of writing a recovery plan for the small whorled pogonia is estimated by the Fish and Wildlife Service to be about $1,000. Currently, so little is known about the distribution and population size of this plant species that the major recovery activities that need to be implemented are simply monitoring and conducting habitat inventories to determine the extent of its range. If, through these inventories, significant numbers of new populations are found, it may be possible to reclassify the species as threatened or remove it from the Act's lists altogether.

The Fish and Wildlife Service and National Marine Fisheries Service are directed to allocate their resources for recovery actions more evenly among those species listed as threatened or endangered. Resources should be allocated on the basis of biological information, with priority given to those species that are most likely to benefit from such support and that are, or may be, in greatest conflict with development activities.

Section 4(f) of the Act is amended to require that each recovery plan incorporate descriptions of site-specific management actions to achieve recovery, criteria by which to judge success of the plan, and time frames and estiamtes of costs to carry out the planned recovery. The Secretary is required to report annually to the House Committee on Merchant Marine and Fisheries and the Senate Committee on Environment and Public Works on the status of efforts to develop and implement recovery plans and on the status of species' recovery.

These descriptions, criteria, and estimates currently are not provided uniformly in recovery plans. Incorporation of this information will ensure that plans are as explicit as possible in describing the steps to be taken in the recovery of a species. The needs of species vary with the extent of their range and demographic characteristics. Therefore, the requirement for description of site-specific management actions in plans should be interpreted broadly as delineation of discrete measures to be taken for species, subspecies, populations, geographic subpopulations, or individuals.

The requirement that plans contain objective, measurable criteria for removal of a species from the Act's lists and timeframes and cost estimates for intermediate steps toward that goal will provide a means by which to judge the progress being made toward recov-

ery. In conjunction with the annual reports to the Congress, this information will allow more effective oversight of recovery activities and better assessment of the adequacy of annual budget requests and appropriations for these activities by the Fish and Wildlife Service, the Congress and private conservation organizations.

Section 4. Monitoring of Recovered Species

Section 4 of S. 675 adds a new subsection to section 4 of the Act to require that the Secretary, in cooperation with the States, implement a system to monitor effectively the status of species that have recovered and been delisted for 5 years following the delisting. In addition, the existing emergency listing authority is to be used whenever, as a result of the monitoring, it is determined to be appropriate to prevent a significant risk to the well-being of any such species.

The new subsection will facilitate progress toward recovery and de-listing by assuring that a species' status will continue to be monitored once it is no longer protected by other provisions of the Act, and by assuring that a species will be relisted promptly if it again declines to the point where it is likely to become threatened or endangered.

The Fish and Wildlife Service and the states are responsible for determining the extent and intensity of monitoring that is needed and appropriate. Monitoring the status of some species may require collection of data on trends in population size, other demographic characteristics, or habitat attributes. For some species systematic consultation, coordination and communication with other federal and state agencies, private conservation organizations and the scientific and academic community may be sufficient.

Section. 5. Cooperation With the States

Section 5(a) of S. 675 amends section 6 of the Act to allow grants to States to assist in monitoring the status of candidate species as provided by the amendment to subparagraph (C) of section 4(b)(3), and to assist in the monitoring of recovered, de-listed species as provided by new subsection (g) of section 4. The criteria for allocation to the States of monies allocated from the cooperative endangered species conservation fund are expanded to include the need to monitor candidate and recovered species.

Effective monitoring of candidate and recovered species requires a joint effort by the U.S. Fish and Wildlife Service and the States. Newly established section 4(g) requires the Secretary to implement a system to monitor the status of recovered species in cooperation with the States. The section 6 cooperative State grant program has proven effective in coordinated Federal and State efforts to recover listed species and, therefore, provides a sound mechanism to assure adequate monitoring of candidate and recovered species. In most cases it is anticipated that the required monitoring of candidate and recovered species should not result in large allocations of resources that would affect adversely the conservation and recovery of listed species.

Section 5(b) of S. 675 further amends section 6 of the Act by adding a new subsection that establishes a cooperative endangered species conservation fund from which funds would be allocated an-

nually from the general revenues of the Treasury to the States without further appropriation. The amount of general revenues deposited annually in the fund are to be equal to five percent of the total Pittman-Robertson and Wallop-Breaux Federal aid accounts for State programs to restore wildlife and sport fish. The funding level of these Federal aid programs serves only as a means of determining the amount of general revenues to be deposited in the fund. The cooperative endangered species conservation fund shall not consist of any of the revenues credited to the other Federal aid programs for sport fish and wildlife, nor shall these section 6 endangered species appropriations affect the funding levels of these other programs in any manner.

Through the cooperative agreement provisions of section 6 the Congress recognized that State officials bear much of the responsibility for managing federally-protected species. The valuable personnel and expertise of the State fish and wildlife agencies always has been an integral part of the endangered species program. For instance, while the U.S. Fish and Wildlife Service has fewer than 200 law enforcement officers and only a few hundred biologists, the States have over 5,000 such officers and several thousand wildlife biologists. Because the habitat of most protected species is on State-owned or private land, there is a clear need for a strong Federal/State partnership.

However, section 6 funding currently is inadequate and the amount provided per cooperative agreement has declined significantly over the past several years. In 1977 section 6 funding provided about $200,000 for each of the 21 cooperative agreements in effect. For fiscal year 1987 the appropriation provided only about $57,000 for each of 76 agreements in effect.

Section 6 funding also has been unreliable over the past seven years. The combination of Administration requests to provide no section 6 funding and to rescind funding already provided, along with the uncertainty of congressional appropriation levels, has made it very difficult for the States to carry out effective projects. As a result, the States have reduced their requests for section 6 grants and curtailed their endangered species activities because of their uncertainty about whether and how much funding would be available. Some States, such as Ohio, have eliminated their requests for section 6 grants because the time and resources required to put together the requests have not resulted in adequate and reliable enough funding to make it worthwhile.

The amendment made by section 5(b) of S. 675, therefore, is essential to implementation of the Act. Other laws, such as the Federal Aid in Wildlife Restoration Act, Federal Aid in Sport Fish Restoration Act, and the Migratory Bird Conservation Fund Act provide guaranteed funding for grants to States for game and sport fish management and for Federal wetlands acquisition. The use of guaranteed funding for endangered species grants to States is justified on two grounds. First, recovery of most species is dependent upon the personnel and other resources of the States. The Conference Report to the 1973 Act stated that:

> * * * the successful development of an endangered species program will ultimately depend upon a good working ar-

> rangement between the Federal agencies, which have broad policy perspective and authority, and the State agencies, which have the physical facilities and the personnel to see that State and Federal endangered species policies are properly executed. The grant program authorized by this legislation is essential to an adequate program. * * * The conferees wish to make it clear that the grant authority must be exercised to make it clear that the grant authority must be exercised it the high purposes of this legislation are to be met.

Second, recovery of threatened and endangered species has proven to be a very long-term process. Such efforts have been underway for a decade or longer for many species whose recovery still is not in sight. Interruptions in funding may have irreversible adverse consequences for a species' recovery. Therefore, recovery efforts require stable and predictable funding to the States.

Section 6. Protection of Plants

Section 6 of S. 675 amends section 9(a)(2)(B) of the Act to make it unlawful not only to remove and reduce to possession any endangered species of plants from areas under Federal jurisdiction, but also to maliciously damage or destroy such species on Federal lands. Additionally, the amendment makes it unlawful to remove, cut, dig up, or damage or destroy any endangered species of plant on any other area in violation of State law or in the course of any violation of a State criminal trespass law.

Currently, anyone who captures, kills or otherwise harms an endangered animal commits a violation of the Act for which substantial criminal and civil penalties may be imposed. By contrast, it is not unlawful to pick, dig up, cut or destroy an endangered plant unless the act is committed on Federal land; and even on federal land, there is no violation of the Act unless the plant is removed from the area of Federal jurisdiction. The basis for this differential treatment of plants and animals under the Act apparently was the recognition that landowners traditionally have been accorded greater rights with respect to plants growing on their lands than with respect to animals. The amendment made to the Act by section 6 of S. 675 does not interfere with the rights traditionally accorded landowners but instead reinforces them in a way that also benefits the conservation of endangered plant species.

The need for additional protection of endangered plants on federal lands is highlighted by the Fish and Wildlife Service's decision not to identify critical habitat for such species when they are listed in order to avoid identifying their location and making them vulnerable to illegal collection and vandalism. For example, no critical habitat was designated for any of the 24 plant species occurring in whole or in part on federal lands which were listed between May 1986 and March 1987.

Additional protection for endangered plants on private and other non-federal lands also is needed. The Act currently offers no protection for endangered plants on these lands. Since early 1985, 59 of the 69 plant species listed occur in whole or in part on non-federal lands. Many of these plants occur on lands acquired by non-

profit conservation organizations or on privately-owned lands where the landowners has signed a voluntary agreement to help protect the species. Yet generally ineffective state trespass laws are often the only deterrent against vandals and unscrupulous collectors.

Endangered plants have been vandalized or taken from private land against the wishes of landowners. Most private landowners take pride in the presence on their land of unique or rare species and are eager to cooperate in their protection. However, private landowners often cannot effectively deter the theft or destruction of plants within their property because the penalties for violations of state law are often too low to provide sufficient deterrence. The penalties authorized by the Endangered Species Act provide a much stronger deterrent to these unlawful activities.

Section 7. Penalties and Enforcement

Sections 7(a) and 7(b) of S. 675 amend sections 11(a) and 11(b) of the Act to increase the maximum civil penalties (except for non-knowing violations, for which the existing $500 maximum would remain unchanged) and criminal fines by a factor of two and a half. Section 7(c) amends section 11(d) to designate these penalties, fines and net proceeds from the sale of seized items for three purposes: (1) for payment of rewards, (2) to offset the cost of caring for seized specimens, and (3) for deposit in the cooperative endangered species conservation fund.

Existing penalties and fines under the Act have not been changed since 1973 despite an increase in the cost of living over that period of approximately 150 percent. Since 1973, the costs to the government of restoring species and rectifying the adverse effects of violations also have increased and now can greatly exceed the current penalties and fines for violations of the Act. Penalties and fines should be assessed with reference, in part, to the costs of restoring damage to species that result from violations. Increasing the maximum penalties and fines will make recovery of such restoration costs possible.

The amendment made to section 11(d) by S. 675 directs the Secretary of the Treasury, whenever the balance of sums received from civil penalties, criminal fines, and the net proceeds from the sale of seized items exceeds $300,000, to deposit in the cooperative endangered species conservation fund an amount equal to the excess balance to assist with the restoration, recovery and protection of species adversely affected by violations of the Act. There is a clear link between violations, which necessarily impair efforts to recover species, and funding for the cooperative endangered species conservation fund, which is essential to the Act's goal of recovery.

Increased penalties and fines also are needed to provide greater deterrence against violations of the Act, since the profits to be made from illegal activities often dwarf current penalties.

Section 8. Authorization of Appropriations

Section 8 of the bill amends section 15 of the Act to authorize increased appropriations through fiscal year 1992. The authorization for section 6 grants to states, however, is no longer necessary because of the new appropriations provision that is added to that

section by the bill. Consequently, subsection (b) of section 15 of the Act is deleted by section 8 of S. 675.

The spending levels authorized in S. 675 begin with the ceilings set for fiscal year 1988 in the bill reported by the Committee in the last Congress ($55.95 million). Ceilings thereafter are increased by 4.3 percent per year for each of the subsequent four fiscal years to offset CBO's projected annual rise in the consumer price index through 1992.

Appropriations reflecting these increased authorization levels are needed to offset the huge increases in the responsibilities of the Fish and Wildlife Service, National Marine Fisheries Service and Department of Agriculture that have occurred since 1981. Over 150 species have been added to the Act's lists. More than 3,000 species remain candidates for listing, and sufficient information currently exists for nearly 1,000 of these to warrant preparation of formal listing proposals. In addition, 167 new recovery plans have been approved since 1982, and nearly an equal number of species remain without such plans. Only five species have recovered sufficiently to be removed from protection under the Act since 1973. During the same period, annual spending to implement the Endangered Species Act has increased by only $7 million.

HEARINGS

The Subcommittee on Environmental Protection of the Committee on Environment and Public Works held one hearing in Washington, D.C., on April 7, 1987, and one hearing in Portland, Maine, on May 26, 1987, on S. 675 and implementation of the Endangered Species Act.

Testimony was received from representatives of the U.S. Fish and Wildlife Service, National Marine Fisheries Service, Animal and Plant Health Inspection Service, the Maine Legislature, State wildlife agencies, conservation organizations, western water development interests, and industry.

ROLLCALL VOTES

Section 7(b) of rule XXVI of the Standing Rules of the Senate and the rules of the Committee on Environment and Public Works require that any rollcall votes taken during consideration of this bill be announced in this report.

There were no rollcall votes taken during the Committee's consideration of this bill. The bill was ordered reported on November 10, 1987, by a unanimous voice vote.

REGULATORY IMPACT

Section 11(b) of rule XXVI of the Standing Rules of the Senate requires the Committee to evaluate the regulatory impact of the reported bill.

It is not anticipated that this bill will impose any significant new regulatory burden.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires each report to contain a statement of the cost of

the reported bill prepared by the Congressional Budget Office. That statement follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, December 8, 1987.

Hon. QUENTIN N. BURDICK,
Chairman, Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the attached cost estimate for S. 675, a bill to amend and extend the Endangered Species Act of 1973, as amended, and for other purposes.

If you wish further details on this estimate, we will be pleased to provide them.

With best wishes,

Sincerely,

EDWARD M. GRAMLICH,
Acting Director.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: S. 675.

2. Bill title: A bill to amend and extrend the Endangered Species Act of 1973, as amended, and for other purposes.

3. Bill status: As ordered reported by the Senate Committee on Environment and Public Works November 10, 1987.

4. Bill purpose: S. 675 would amend the Endangered Species Act of 1973 to require new monitoring activities and to change the manner in which state cooperative agreements are funded. The bill would also authorize annual appropriations to the Commerce, Agriculture, and Interior departments for activities carried out under the act during fiscal years 1988–1992.

5. Estimated cost to the Federal Government:

[By fiscal years, in millions of dollars]

	1988	1989	1990	1991	1992
Subject to appropriation:					
Authorization level	44	46	48	50	52
Estimated outlays	35	46	47	49	52
New direct spending authority:					
Estimated budget authority		15	16	18	18
Estimated outlays		12	16	17	18

The costs of this bill fall within budget function 300.

Basis of estimate: Authorization levels shown are those for annual departmental appropriations, including those for ongoing interagency and international cooperation programs, as specified in Section 8. It is assumed that the full amounts authorized will be appropriated for each fiscal year.

In addition, the above table shows annual estimates of new budget authority provided under Section 5, which would alter the way in which the Department of the Interior supports ongoing state endangered species programs. Currently, financial assistance

grants are provided under cooperative agreement through annual appropriations. Under Section 5 expenditures for such grants would instead be made, without appropriation action, from a newly created cooperative endangered species conservation fund beginning in fiscal year 1989. This fund would be credited annually with an amount equal to 5 percent of combined total credits to the federal aid-wildlife and sport fish restoration funds. Credits to and spending from the two existing funds would not be affected; deposits to the new fund would be made from the general fund. Estimates of new direct spending for each year are based on current CBO estimates of annual credits to the federal aid-wildlife and sport fish restoration funds—estimated to be about $300 million in fiscal year 1989 and more in subsequent years. The bill would provide no fiscal year 1988 funding for state grants, but would more than triple the size of such grants beginning in 1989. In that year, an estimated $15 million would be available for the grant program, which received only $4.3 million in fiscal year 1987.

Outlays for all endangered species programs have been estimated on the basis of historical spending patterns.

6. Estimated cost to State and local governments: None.

7. Estimate comparison: None.

8. Previous CBO estimate: On December 4, 1987, the Congressional Budget Office prepared a cost estimate for H.R. 1467, a similar bill ordered reported by the House Committee on Merchant Marine and Fisheries.

9. Estimate prepared by: Deborah Reis.

10. Estimate approved by: C.G. Nuckols (for James L. Blum, Assistant Director for Budget Analysis).

ADDITIONAL VIEWS OF MR. SIMPSON

Much has been said in the report about the establishment of experimental populations of wolves and the ability of the Secretary of the Interior and the state fish and wildlife agencies to manage such populations. That issue has particular relevance in my State of Wyoming and I believe additional discussion is necessary to demonstrate that the Endangered Species Act will not function properly, maintain legislative credibility, public support, and be cooperatively implemented by Interior and the state fish and wildlife agencies unless additional action is taken.

In 1985 the United States Court of Appeals for the eighth Circuit ruled [*Sierra Club, et al.* v. *William Clark* (755 F. 2d 608, 8th Circuit 1985)] that regulated taking of a threatened species may not be permitted by the Secretary as part of a program of conservation except in the situation where population pressures within a given ecosystem cannot be otherwise relieved. This holding is based on a misunderstanding of the differing levels of protection accorded endangered and threatened species under the Act.

The fundamental scheme of the Act, which was established by Congress in 1973 and which has served as the basis of subsequent amendments such as the experimental population provisions added in 1982, is that stringent protections are required for endangered species which are considered to be in danger of extinction throughout all or a significant portion of their range while threatened species, those not in immediate danger of extinction, are subject to less stringent protection. For threatened species regulations are tailored to the needs of the particular species. The intent of the Act, therefore, is that the Secretary possesses a wide range of options when it comes to conserving threatened species, a concept carried forward in section 4(d), but misunderstood in the 1985 8th Circuit ruling.

Indeed, as this 100th Congress Committee Report has stated, this concept was employed in the 1982 amendments establishing programs for experimental populations of endangered or threatened species introduced into areas outside their current range. As explained in both the House Report (97-567) and the Senate Report (97-418), such experimental populations are to be treated as threatened species under the Act because of the broad flexibility which the Secretary enjoys in promulgating regulations to protect threatened species, including the authority to permit taking of individual members of such species.

It is clearly the intent of the Act, under Section 4(d), that the Secretary's authority for management of threatened species must be a tailored conservation program which strives to meet the needs of the species and have a rational relationship to the goal of the Act. The goal, of course, is to bring the endangered or threatened species to the point where the measures of the Act are no longer

necessary. That goal is established in the definition of "conservation" in section 3(3) of the Act. That definition makes clear that the methods and procedures which may be employed by the Secretary to accomplish this goal are not limited to those specifically enumerated in the definition, nor is it intended that the necessarily broad authority of the Secretary respecting threatened species, bestowed in 4(d), be curtailed by the illustrative examples in the definition. The decision by the 8th Circuit does not recognize these important facts.

Congress in 1973 established differing levels of protection for endangered species and threatened species and had the wisdom, in section 4(d), to invest in the Secretary wide discretion in establishing conservation programs for threatened species ["the Secretary shall issue such regulations as he deems necessary and advisable for the conservation of such species"]. As the dissenting judge in the 8th Circuit ruling observed, upsetting this carefully structured arrangement by curtailing the Secretarty's authority to manage threatened species flies in the face of the plain language of the Act and its legislative history. 755 F.2d at 620.

These are important matters in my state and others where reintroduction of wolves is being pressed on the people of the state. In Wyoming large predators such as grizzly bears regularly present conflicts with humans, livestock and other animals. If administering agencies are denied authority to control such conflicts, the future of the Endangered Species Act is indeed doubtful, as are the resources it is meant to protect. As experience in Minnesota with the eastern timberwolf demonstrates, once the people become aware that wildlife agencies are powerless to control livestock depredations by large predators, they may naturally do what must be done to protect their property. The reintroduction of an experimental population or the successful management of threatened species must not only embrace the needs of that species, but consider the impacts to other wildlife and to man.

In Wyoming, our state fish and wildlife agency cannot support the reintroduction of wolves to Yellowstone National Park. In an October 23, 1987 Newsrelease, the Fish and Game Commission reaffirmed its opposition to wolf reintroduction until: (1) there is a better scientific understanding of how wolves will compete with grizzly bears in Yellowstone and surrounding areas, and (2) there is a clear understanding of how wolves can be controlled if they prove to be detrimental to other wildlife or to livestock.

The latter question cannot be answered until the 8th Circuit decision is overturned. Further complicating the matter is a state statute classifying the wolf as a predatory animal. This statute does not give the Fish and Game Commission sole authority for management of wolves within the State of Wyoming. The people of Wyoming are open minded and intend to work with all interested parties to insure that any action taken is in the best interest of the state's wildlife resources. I believe that their view is realistic and reasonable.

Even before we have resolved these questions, however, others are pressing ahead to have Interior introduce wolves to Yellowstone National Park. Ignoring the disruptive 8th Circuit decision and the requests of State fish and wildlife agencies for change, a

group of 7 environmental and animal rights organizations have written the Secretary of Interior urging that agency to move ahead with the introduction of wolves to Yellowstone National Park. The language of this Committee report implies that the Secretary of Interior may even proceed with such reintroductions in the face of opposition—without the support and cooperation of local agencies and citizens. Such actions are folly and can only damage the Act and most importantly the resources it is intended to conserve.

ALAN K. SIMPSON.

CHANGES IN EXISTING LAW

In the opinion of the Committee, it is necessary to dispense with the requirements of section 12 of rule XXVI of the Standing Rules of the Senate in order to expedite the business of the Senate.

○